

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
1 September 2005 (01.09.2005)

PCT

(10) International Publication Number
WO 2005/079726 A1

(51) International Patent Classification⁷: **A61H 31/00**,
A62B 7/00, 18/00, A61M 16/00

Auckland, 1005 (NZ). GLEESON, Oliver [NZ/NZ]; 19A
Ropata Avenue Point England, 1006 Auckland (NZ).

(21) International Application Number:
PCT/NZ2005/000023

(74) Agents: ADAMS, Matthew, D et al.; A J Park, 6th Floor
Huddart Parker Building, PO Box 949, Wellington, 6015
(NZ).

(22) International Filing Date: 18 February 2005 (18.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
531332 23 February 2004 (23.02.2004) NZ
534606 6 August 2004 (06.08.2004) NZ

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(71) Applicants (*for all designated States except US*): FISHER
& PAYKEL HEALTHCARE LIMITED [NZ/NZ]; 15
Maurice Paykel, East Tamaki, Auckland, 1706 (NZ).
PRENTICE, Craig, Robert [NZ/NZ]; 95 Kiwi Es-
planade, Mangere Bridge, Auckland, 1701 (NZ).

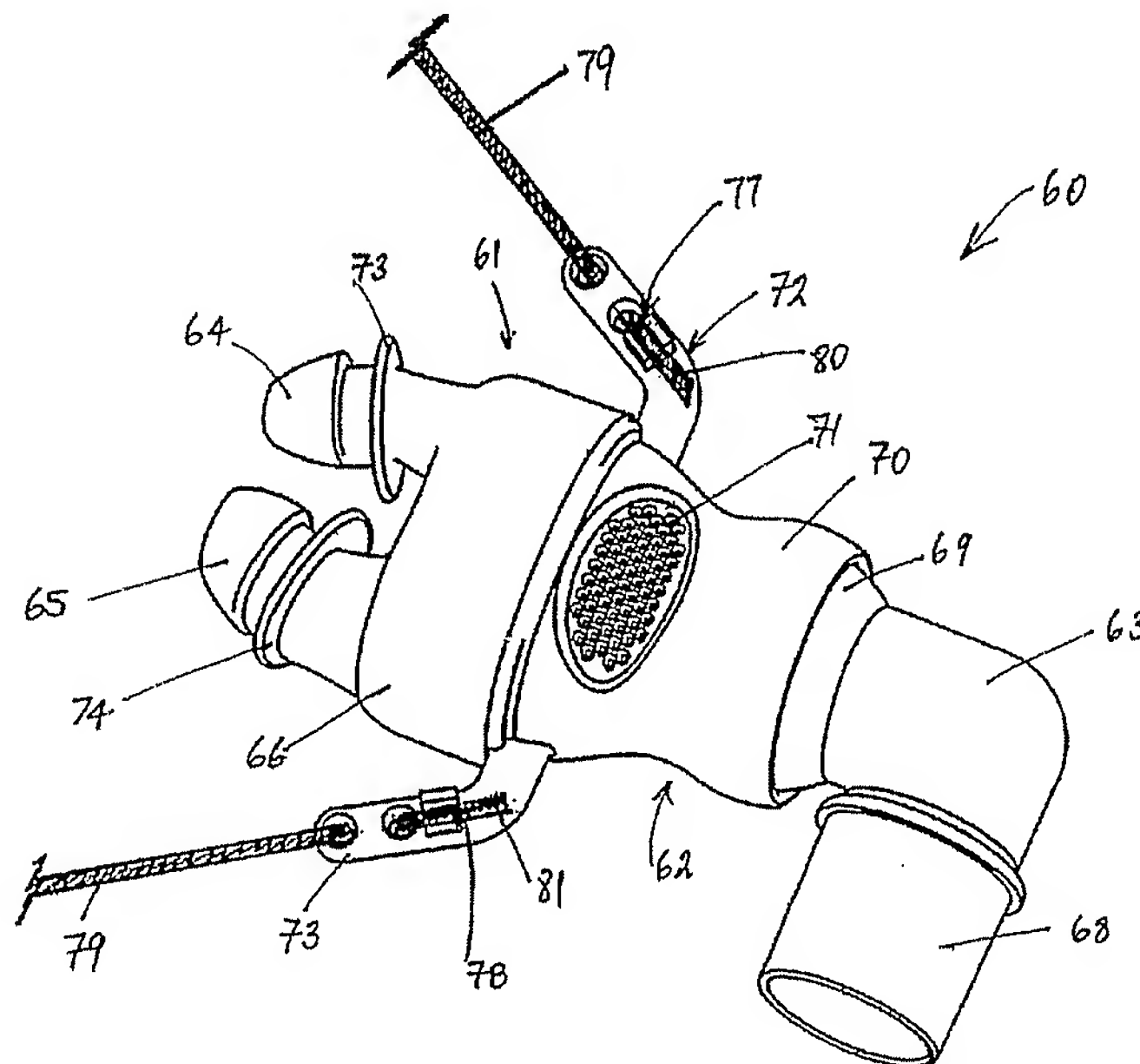
(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): MCAULEY, Alas-
tair, Edwin [NZ/NZ]; 58A Ngapuhi Road, Remuera,

[Continued on next page]

(54) Title: BREATHING ASSISTANCE APPARATUS



(57) Abstract: The present invention comprises a nasal cannula (2), shaped to fit within a user's nares, where the nasal cannula in-
cludes at least one prong (24, 25) allowing high flow delivery of humidified gases and creates positive airway pressure in the patient's
airway. The prongs have angled ends (31, 32), such that in use, gases flowing through the prongs are directed to the user's nasal
passages. The nasal cannula body is partially swivelling and preferably has a ball joint connector (37, 39). In another embodiment
the nasal cannula may have at least one flared end prong (31, 32) that preferably seals within a patient's nare.



SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*